

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Brot. 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,175	02/11/2002	Hans-Peter Koch	10191/2245	5019
7.	590 05/19/2005		EXAMINER	
KENYON & KENYON			PONTAINE, MONICA A	
One Broadway New York, N			ART UNIT	PAPER NUMBER
,			1732	
			DATE MAILED: 05/19/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	h/				
Office Action Summary								
		10/074,175 • Examiner	KOCH ET AL.					
ı 	,							
	The MAILING DATE of this communicatio	Monica A. Fontaine	the correspondence addr	1988				
Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>28 February 2005</u> .							
	This action is <b>FINAL</b> . 2b) This action is non-final.							
3)[								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠ Claim(s) <u>1-28</u> is/are pending in the application.								
,	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>8-11 and 24</u> is/are allowed.								
6)⊠	6)⊠ Claim(s) <u>1-7,12-23 and 25-28</u> is/are rejected.							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9)☐ The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	ınder 35 U.S.C. § 119			•				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:								
1. ☑ Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment		<b>∧</b> □	(0.7.0.4.4.7.)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date								
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SI	B/08) 5) D Notice of Inform	mal Patent Application (PTO-15	52)				
Paper No(s)/Mail Date 6) Uther:								

## **DETAILED ACTION**

This office action is in response to the Amendment filed 28 February 2005.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 (and dependent claims 2-7 and 12-13), and 28 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for pressed parts "contain[ing] little or no more organic compounds compared to pressed parts made of polymer-bonded, soft magnetic composites" (Specification, Page 5, lines 11-14), does not reasonably provide enablement for pressed parts "not including a thermoplastic material" (instant claims 1 and 28). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to carry out the invention commensurate in scope with these claims.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1732

Claims 14-23, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rutz, in view of Bock, as stated in the paper mailed 26 November 2004. The rejection is repeated here for convenience.

Regarding Claim 14, Rutz shows that it is known to carry out a method for manufacturing a pressed part (Abstract), the method comprising providing a starting mixture including an iron powder and an auxiliary pressing agent (Column 6, lines 27-48), pressing the starting mixture to form a pressed part (Column 6, lines 27-48), and annealing the pressed part (Column 7, lines 15-36). Rutz does not show a postforming procedure. Bock shows that it is known to carry out a method of manufacturing a pressed part comprising postforming an annealed part and reannealing the pressed part (Column 3, lines 24-26). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to carry out Bock's postforming process and re-annealing process during Rutz's molding procedure in order to refine and secure the annealed article.

Regarding Claim 15, Rutz shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein mechanical shaping takes place as a compression process at a pressure between 600MPa and 900MPa (Column 6, lines 42-44). Rutz does not show carrying out this mechanical shaping prior after one annealing process. Bock shows that it is known to carry out mechanical shaping processes after one annealing process and before another annealing process (Column 2, lines 15-24, 52-65). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to carry out Rutz's and Noda's pressing process after the annealing process, as suggested by Bock, in order to refine the shape of the annealed article.

Regarding Claim 16, Rutz shows the process as claimed as discussed in the rejection of Claims 14 and 15 above, including a method wherein mechanical shaping takes place as a compression process at a pressure of between 700 MPa and 800MPa (Column 6, lines 42-44), meeting applicant's claim.

Regarding Claim 17, Rutz shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein the annealing is performed at temperatures between 380°C and 450°C over a time period of 10 to 120 minutes (Column 7, lines 25-27, 32-33), meeting applicant's claim.

Regarding Claim 18, Rutz shows the process as claimed as discussed in the rejection of Claims 14 and 17 above, including a method wherein the annealing is performed at a temperature of 425°C over a time period of 30 to 60 minutes (Column 7, lines 25-27, 32-33), meeting applicant's claim.

Regarding Claim 19, Rutz shows the process as claimed as discussed in the rejection of Claim 12 above, including a method wherein the annealing is performed at temperatures between 150°C and 400°C over a time period of 10 to 120 minutes (Column 7, lines 25-27, 32-33), meeting applicant's claim.

Regarding Claim 20, Rutz shows the process as claimed as discussed in the rejection of Claims 14 and 19 above, including a method wherein the annealing is performed at a temperature between 230°C and 310°C over a time period of 30 to 60 minutes (Column 7, lines 25-27, 32-33), meeting applicant's claim.

Application/Control Number: 10/074,175

Art Unit: 1732

Regarding Claim 21, Rutz shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein the pressing is performed at room temperature at an a pressure of between 600MPa and 900MPa (Column 6, lines 42-44), meeting applicant's claim.

Regarding Claim 22, Rutz shows the process as claimed as discussed in the rejection of Claims 14 and 21 above, including a method wherein the pressing is performed at a pressure between 700MPa and 800MPa (Column 6, lines 42-44), meeting applicant's claim.

Regarding Claim 23, Rutz shows the process as claimed as discussed in the rejection of Claim 14 above, but he does not show a re-annealing process in air. Bock shows that it is known to carry out an annealing and re-annealing process in air (Column 2, lines 52-65). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to anneal and re-anneal in air, as suggested by Bock, during Rutz's molding process in order to capitalize on desirable chemical and physical changes which occur in this type of environment.

Regarding Claim 26, Rutz shows the process as claimed as discussed in the rejection of Claim 14 above, but he does not show a mechanical shaping process after re-annealing. Bock shows that it is know to carry out a method of manufacturing a pressed part comprising mechanically processing at least sections of a surface of the pressed parts after re-annealing (Column 3, lines 24-26). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to carry out Bock's re-annealing and mechanical shaping process during Rutz's molding procedure in order to refine and secure the annealed article.

Regarding Claim 27, Rutz shows the process as claimed as discussed in the rejection of Claims 14 and 26 above, but he does not show grinding after re-annealing. Bock shows that it is know to carry out a method of manufacturing a pressed part comprising grinding after re-

Art Unit: 1732

annealing (Column 3, lines 24-26). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to carry out Bock's re-annealing and grinding process during Rutz's molding procedure in order to refine the annealed article.

Claim 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Rutz and Bock, as applied to claim 14 above, further in view of Bayer (as stated in the paper mailed 26 November 2004). Rutz shows the process as claimed as discussed in the rejection of Claim 1 above. including using phosphatized pure iron powder (Column 4, lines 4-8), but he does not specifically show an auxiliary agent of wax. Bayer shows that it is known to carry out a method for manufacturing a pressed part wherein iron powder is combined with a polymeric wax as an auxiliary pressing agent (Column 2, lines 23-26). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Bayer's auxiliary agent in Rutz's and Bock's molding method in order to obtain a product which has desired chemical and physical properties.

## Allowable Subject Matter

Claims 8-11 and 24 are allowed.

## Response to Arguments

Applicant's arguments filed 28 February 2005 have been fully considered but they are not persuasive.

Art Unit: 1732

Applicant's arguments with respect to claims 1-7 and 12-13 have been considered but are moot in view of the new ground(s) of rejection.

With regard to Claims 14-23 and 25-27, applicant contends that Bock's grinding does not postform the molded part. This is not persuasive because a postforming process is only required to shape a product after it is formed. It is maintained that grinding does indeed shape (or form) the molded part after it is molded. Furthermore, applicant himself includes grinding as a postforming method (see claim 27).

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/074,175

Art Unit: 1732

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 16, 2005

Page 8